

APPENDIX A

U.S. Patent Application No(s):

08/643,798	09/143,470	09/387,462
09/062,391	09/451,828	
09/283,503	09/062,389	
08/753,007	09/128,155	
09/398,496	09/102,705	
08/820,364	09/131,263	
08/843,652	09/124,538	
08/843,651	09/146,950	
08/851,160	09/145,056	
08/966,269	09/163,523	
09/436,183	09/164,220	
09/146,951	09/164,169	
09/128,709	09/201,442	
09/127,856	09/224,669	
09/354,809	09/259,387	
09/130,491	09/298,531	
09/388,280	09/322,790	
09/388,279	09/337,930	
09/057,951	09/342,767	
09/065,661	09/363,630	
09/065,363	09/369,693	

APPENDIX B

U.S. Patent No(s).

5,952,171

5,989,909

6,013,257

For filing

PAGE 1

PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP, WHICH MERGES:

"MILLENNIUM BIOTHERAPEUTICS, INC.", A DELAWARE CORPORATION,
WITH AND ~~IN~~ INTO "MILLENNIUM PHARMACEUTICALS, INC." UNDER THE
NAME OF "MILLENNIUM PHARMACEUTICALS, INC.", A CORPORATION
ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE,
AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-FIRST DAY OF
DECEMBER, A.D. 1999, AT 9:30 O'CLOCK A.M.



001016341

Edward J. Freel
Edward J. Freel, Secretary of State

AUTHENTICATION: 0201587

DATE: 01-14-00

DEC 20 1999 10:23 FR HALE AND DORR LLP

STATE OF DELAWARE
TO 1302674838
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:30 AM 12/21/1999
991550845 - 2322355

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

MILLENNIUM BIOTHERAPEUTICS, INC.
(a Delaware corporation)

INTO

MILLENNIUM PHARMACEUTICALS, INC.
(a Delaware corporation)

Millennium Pharmaceuticals, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify:

FIRST: That the Corporation was incorporated on the 13th day of January, 1993, pursuant to the General Corporation Law of the State of Delaware.

SECOND: That the Corporation owns all of the outstanding shares of the voting stock of Millennium BioTherapeutics, Inc., a corporation incorporated on the 27th day of May, 1997 pursuant to the General Corporation Law of the State of Delaware.

THIRD: That the Board of Directors of the Corporation, at a meeting duly held on the 13th day of October, 1999, duly adopted the following resolutions:

RESOLVED: That, pursuant to Section 253 of the Delaware General Corporation Law, the Corporation is hereby authorized to merge Millennium BioTherapeutics, Inc., a Delaware corporation, of which the Corporation owns 100% of the outstanding voting stock, into the Corporation;

RESOLVED: That the Chief Executive Officer, the President, the Chief Financial Officer, the General Counsel and Secretary or Assistant Secretary of the Corporation be and each hereby is, authorized to execute a Certificate of Ownership and Merger with respect to the merger of Millennium BioTherapeutics, Inc. into the Corporation and to cause the same to be filed with the Secretary of State of Delaware, and to take all such other actions and to execute all such other instruments and agreements as they or any of them may deem appropriate to effect such merger;

RESOLVED: That the merger of Millennium BioTherapeutics, Inc. into the Corporation shall be effective upon the filing of a Certificate of Ownership and Merger with the Secretary of State of Delaware.

707280-684660

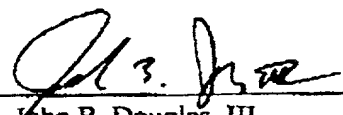
IN WITNESS WHEREOF, Millennium Pharmaceuticals, Inc. has caused this Certificate to be signed by Mark J. Levin as President and attested by John B. Douglas, III as Secretary, this 21st day of December, 1999.

MILLENNIUM PHARMACEUTICALS, INC.

By: 

Mark J. Levin
President

ATTEST:


John B. Douglas, III